(X14C)

21 May 1976

[redacted]

Monitoring Deployment of MIRVed SLBMs

Our capability to monitor Soviet deployment of MIRVed SLBMs will depend on the characteristics of the missile and the submarines which carry them. In particular, our capability will depend on:

--whether a MIRVed SLBM uses a launcher which is distinguishable [redacted] from launchers for nonMIRVed missiles,

--whether unique operating procedures, equipment and facilities will be associated with MIRVed SLBMs, and

--the difficulties which the Soviets would face in attempting to covertly deploy MIRVed SLBMs in launchers ostensibly configured for nonMIRVed missiles.

If the launcher for a MIRVed SLBM must be significantly modified in order to accomodate the MIRVed missile, and is therefore distinguishable from launchers for unMIRVed missiles, our uncertainty in monitoring deployment would be negligible. We would be able to identify the MIRVed launchers during the [redacted] phase of the systems development program or the [redacted] construction or conversion program for the submarines. We would then be able to count, [redacted] the number of submarines equipped with

MIRV launchers as they are constructed or converted.

[redacted]

Monitoring Implications if Launchers are Not Distinguishable

If there is no observable difference between the launchers for MIRVed and nonMIRVed SLBMs, [redacted]

We would then have to fall back on other sources--

[redacted]

Pages: 3

Exemptions: (b)(1), (b)(3)

If a SALT TWO agreement contained a provision to count under the MIRV limit all launchers on all submarines of a class if one submarine of that class is equipped with MIRVs, then the monitoring task would be eased from one of identifying specific units to one of identifying the classes of submarines which launch MIRVed SLBMs. [redacted]

To convert these data into the number of launchers which could be equipped with MIRVs before identification, a program to modify six submarines per year was assumed. This number was judged to be a reasonable upper limit for a program to convert submarines as part of an overhaul or repair program. The number of launchers

converted would depend on the class of submarine involved, and a range of from 12 to 20 launchers per submarine was assumed. We estimate that the number of launchers which could be converted for MIRVs before we would have high confidence of identification would be 60 to 100, and 36 to 44 for moderate confidence.

Once this initial association is obtained all launchers in the class would count and our uncertainty would be negligible.

If such a counting rule defined class according to launcher, we would need only to associate a MIRVed SLBM with a given launcher. [redacted] All launchers of that type would then be counted and our uncertainty would be negligible.

Pages: 6

Exemptions: (b)(3)

[redacted]

Monitoring Deployment of MIRVed ICBMs

The table below gives CIA's estimates of uncertainty in monitoring MIRVed ICBM deployment with various combinations of colateral constraints and counting rules, including the latest US proposal--a MIRVed missile counting rule plus a launcher type counting rule. The table presents CIA's judgments of the value of the various combinations of counting rules and constraints in reducing uncertainty in monitoring several overt and covert deployment problems. The monitoring problems considered are:

--Overt Case #1 - Uncertainty about the mix of MIRVed and unMIRVed versions of the SS-17, SS-18, and SS-19. Assumes the Soviets complete development of MIRVed and unMIRVed versions of each missile and that 200 silos house the SS-17, 308 house the SS-18, and 410 house the SS-19. We would then be faced with the problem of determining how many of the SS-17, SS-18 and SS-19 silos contained the MIRVed version of each missile.

--Overt Case #2 - Conversion of all SS-11 launchers remaining in the force to the SS-17 or SS-19 configuration coupled with a Soviet claim that some contain older, nonMIRVed missiles like the SS-11.

It should be noted that the Soviets have 60 SS-19 silos which were completed well before the SS-19 was ready for deployment and we believe these house improved variants of the SS-11. At Tyuratam, the Soviets apparently modified an SS-19 silo (Type IIIG) which had previously been used only in tests of the improved SS-11 before the silo could be used in tests of the SS-19. The modification took some 3 to 4 months to complete. A similar modification may be necessary when the Soviets replace the SS-11s in the 60 SS-19 silos with SS-19 missiles.

--Covert Case #1 - Covert deployment of MIRVed SS-18s in SS-9 silos. In this case, it is assumed that about 100 SS-9 silos are not converted to the SS-18 configuration.

--Covert Case #2 - Covert deployment of SS-17 missiles in SS-11 silos or SS-19s in SS-11 silos following a hardening program. This scheme assumes that the 420 silos modernized for the SS-11 Mod 2 or 3 are available for covert deployment.

--Covert Case #3 - Covert deployment of MIRVed SS-X-16 in SS-13 silos. Assumes the Soviets develop a MIRVed version of the SS-X-16 using SS-13 silos in